

## CLAIMS:

1. A system for monitoring food contamination incidents in a food distribution chain, the system comprising:
  - a distribution database containing distribution data for all identified links in the food distribution chain; and
  - an on-call food tracking system for identifying a source for a contaminated food item via the distribution database.
2. A system for determining how to respond to a food contamination incident, the system comprising:
  - a food profile database containing a plurality of food profiles, each food profile being a statistical breakdown of a quantity of a food product at each identified point in a food distribution chain, each food profile representing a different food item, the food profile database containing a specific food profile for each identified food item; and
  - a food tracking system for identifying a source for a contaminated food item, the food tracking system capable of relating geographically related health events to specific suppliers of food items in a geographic area of the health events; and
  - a delivery data information system for retrieving product delivery information associated with the specific suppliers within a time frame associated with the health events, such that the specific supplier can be linked to the health events;wherein the food profile database provides a statistical analysis of the quantity of contaminated product that has not yet been consumed or destroyed for the purpose of choosing a course of action.

3. The system of claim 2, wherein the course of action is a food item recall.

4. An expert system providing a web-based interface for use by registered personnel at pre-determined canary sites, the expert system comprising:

- a database for authenticating users and storing health event information, the database allowing authenticated users to enter health record information; and

- a data capture system for processing newly added health record information against existing data records within a pre-determined time frame, the data capture system for retrieving health information from a CDC information system and from other public health system, the data capture system for comparing the processed health record information against the retrieved health information to identify food related incidents at an early stage.